

REMARKS

Reconsideration of the patentability of the claims as amended and as newly presented herein is respectfully solicited.

An error in figure 2 has been corrected. The legend, "(INDIVIDUAL)" under ST101 has been changed to "(GENERAL)". No prohibited new matter has been introduced by this correction. The examiner's attention is directed to the legends on either side of the changed legend for support for this correction. Further reference is made to page 51, lines 2 and 11-13 where this correction is supported. The corrected drawing is being submitted in the required PTO format. As to claim 17, the basis can be found at page 4 paragraph starting at line 15. It is urged that this drawing correction be entered.

Claims 47-86 have been cancelled and replaced by new claims 87-114. The new claims being submitted in this application are directed to the disclosed feature, "a relationship of preparing electronic program information, distributing the prepared electronic program information, and transmitting the electronic program information". To the extent that subject matter is disclosed and/or claimed in this application that does not appear in new claims 87-114, the right to file one or more division applications directed to this information is respectfully reserved. Nothing contained in this or any other response should be considered to have abandoned any patentable information in this application that does not appear in the instant claims.

It is to be especially noted that the instant claims define the previously claimed "broadcast data" as a "transport stream".

Further, it should be noted that claims 88, 93, and 98 set forth the same limiting feature; claims 89, 94, and 99 set forth the same limiting feature; claims 90, 95 and 100 set forth the same limiting features; claims 91, 96, 101 and 102 set forth the same limiting features; claims 104, 108 and 112 set forth the same limiting features; claims 105, 109 and 113 set forth the same limiting features; and claims 106, 110 and 114 set forth the same limiting features.

There are now only two independent claims, 87 and 103. These are based on the content of previous claim 47 by have been revised to clearly show the use of distributing information (I2 in the specification at page 46, line 8 to page 47, line 4, for instance) prepared by the electronic program information preparing means.

Subsidiary claims 92 and 107 have been rewritten to explicitly relate to “the enterpriser service correspondence information I2” as disclosed in the instant specification at page 47, lines 14 to 17.

Claims 97 and 111 have been drafted to specifically refer to the matter originally disclosed in the specification at page 54, line 17 to page 56, line 4.

Claims 88, 93, and 98 have been rewritten, based on the content of former claim 49, although the phrasing is somewhat different from the original claims.

Claims 89, 94, and 99 have been rewritten based on the content of former claim 53.

Claims 90, 95 and 100 have been rewritten based on the content of former claim 51.

Claims 91, 96, 101 and 102 have been rewritten based on the content of former claim 48.

Claims 104, 108 and 112 have been rewritten based on the content of former claim 56.

Claims 105, 109 and 113 have been rewritten based on the content of former claim 57, and

Claims 106, 110 and 114 have been rewritten based on the content of former claim 58.

The instant submitted claims define the present invention based on the following combined configuration:

The present invention is applied to a system in which a plurality of electronic program informations concerned with plural channel services (each service usually includes a plurality of programs), respectively, are prepared, distributed to transport streams, and transmitted to users' receivers via the transport streams.

As supported in Figs. 2-6, a practical configuration embraced by the instant claims comprises follows:

An electronic program information preparing and transmitting apparatus, for preparing electronic program information concerning a plurality of channel services (**ST100**, **ST101**, ..., **ST110**, ...), and apparatus for transmitting the prepared electronic program information toward users' terminals (that is to the viewing public) via a plurality of transport streams (**TS1**, **TS2**, **TS3**, ...), comprising:

electronic program information preparing means (11; 31) that is adapted to prepare:

(i): distributing information (**I2**); that is information indicating which channel service should be distributed to which transport stream and

(ii): for each channel service, both of a first type of electronic program information ("individual"; Fig. 3 and 5) concerning the channel service, and a second type of electric program information ("general"; Fig. 4 and 6) concerning the channel service. The first type of electronic program information is described with a first degree of detail (for example, individual; seven days in detail); and the second type of electronic program information is described with a second detailed degree (for example general; one day in brief). The degrees of detail are different in description of program information between the first and the second degrees of detail;

electronic program information distributing means (12; 13; 22; 34) for distributing, on the basis of the distributing information, to each transport stream,

(i): the first type of electronic program information (**Individual**) concerning each channel service (e.g., **ST100**) to a first transport stream (**TS1**) assigned to the channel service (**ST100**), and

(ii): the second type of electronic program information (**General**) concerning each channel service (**ST100**) to the remaining one or more transport streams (**TS2**, **TS3**, ...) other

than the transport stream (TS1) to which the first type of electronic program information (Individual) has been distributed; and

transmitting means (13, 22) for transmitting toward the users' terminals the transport streams (TS1, TS2, ...) to which the electronic program (Individual, General) information has been distributed.

In this preparation and transmission of the electronic program information concerning the channel services provided by a plurality of broadcast service stations through a plurality of transport streams, the correspondence between the channel services (i.e., the electronic program information) and the transport streams are well prepared and controlled depending on the first type of electronic program information (individual) or the second type of electronic program information (general), both prepared for every channel service (i.e., programs to be broadcast by the same broadcast service station).

Therefore, as clearly understood from the above, there is a significant distinction between the present invention and the disclosures of the Terakado et al. (U.S. Patent 6,311,329), the Yuen et al. (U.S. Patent 6,447,705), and/or the Kim (U.S. Patent 6,405,372) taken alone or in combination. In considering this assemblage of references, it is to be noted that, with the filing of the certified translation of the instant priority document, the Kim et al. patent is no longer a proper reference under 35 USC 103/102(e) because its US filing date is later than the instant priority date. Further, there is no conflict between the instant claims and the claims of the Kim et al. patent. Therefore, 37 CFR 131 is applicable and this patent is not available as a reference.

The Terakado et al, patent discloses an information providing apparatus and method, in which a hierarchy structure of data, A1 to A3, including data of an electronic program guide, is used, as shown in Figs. 4A to 4C. The A1 data is composed of, for example: a broadcasting date, a start time, and an end time, which may possibly be changed. The A2 data is composed of, for example: a program name, which will not be changed. And the A3 data is composed of still pictures, moving pictures, voice and other information, which becomes a comparatively large volume of data. This hierarchy structure of data A1 to A3 makes it easier to cope with changes in contents of the data including the program guide.

The Yuen reference discloses an EPG that displays program guide data with different levels of detail related to the same program.

The Kim et al. patent discloses a system in which EPG data for each channel is carried within each channels' bit stream, where the second tuner tunes to each subsequent channel and stores the EPG data.

However, none of the cited prior art references teaches or suggests the configuration of the electronic program information distributing means (12; 13; 22; 34) according to Applicant's claimed invention. Basically, the cited prior art references do not disclose at all that, in transmitting EPG programs in connection with a plurality of transport streams (TS1, TS2, TS3, ...), each transport stream is differentiated from the others based on the fact that the transport stream is assigned to either the self broadcast service station or the other broadcast service stations.

In addition to such differentiated transmission of EPG data, the prior art references do not teach or suggest the use of the first and second types of electronic program information, that are different from each other in their description of program information.

Therefore, unlike Applicants' invention, the prior art references fail to describe the transmission of EPG program data in accordance with correspondence between the plural channel services (i.e., the electronic program information) and the plural transport streams.

That is, even combining the prior art references, it is impossible for a person of ordinary skill in this art to have arrived at the configuration of, "distributing, on the basis of the distributing information, to each transport stream,

(i): the first type of electronic program information (**Individual**), concerning each channel service (e.g., ST100), to a first transport stream (TS1) assigned to the channel service (ST100), and

(ii): the second type of electronic program information (**General**), concerning each channel service (**ST100**), to the remaining one or more transport streams (**TS2, TS3, ...**) other than the transport stream (**TS1**) to which the first type of electronic program information (**Individual**) is distributed.”

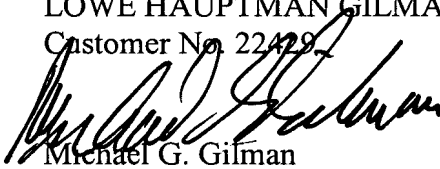
Therefore, in view of the foregoing amendments and arguments, it is respectfully submitted that the present application is in condition for allowance.

There is being filed herewith a certified translation of the Japanese patent application upon which a claim for priority has been based. With the filing of this certified translation, it should be clear that the effective filing date of this application is the filing date of the Japanese priority application, December 5, 1997.

It is believed that the instant claims amply identify these differences in a manner that is sufficient to make the instant claimed invention patentable over this reference. The secondary reference, and the references that had previously been applied, have been considered, but no disclosure found therein that is antithetical to the patentability of the instant invention.

Respectfully submitted,

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Attachments: Certified translation of priority document
Five (5) sheets of drawings

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FIG. 2

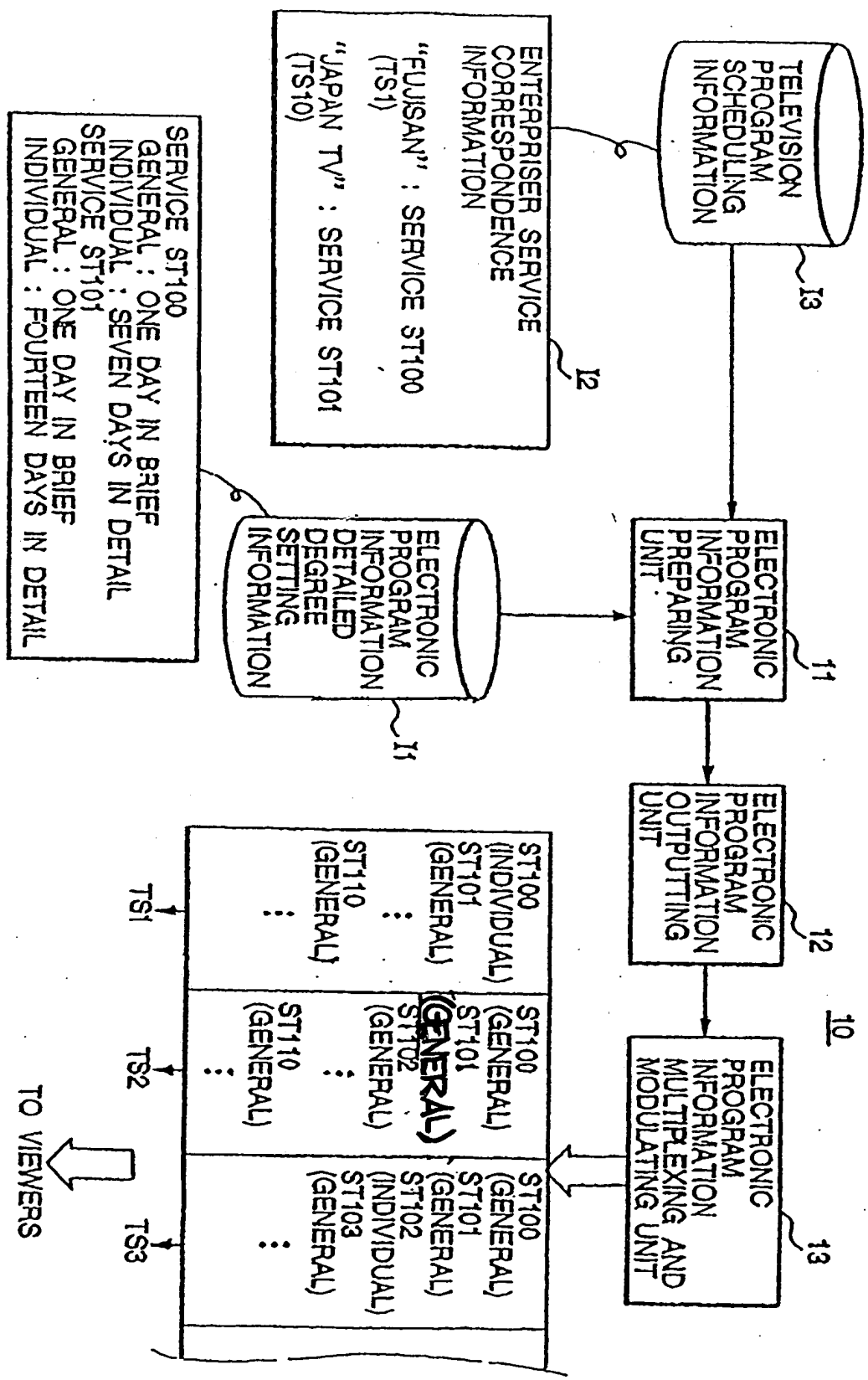


FIG. 2

